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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,538	01/31/2001	Ian E. Abrahams	2-591.5	3241
4955	7590	11/02/2005	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			GRAYSAY, TAMARA L	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,538

Applicant(s)

ABRAHAMS ET AL.

Examiner

Tamara L. Graysay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. This application presents a claim for subject matter not originally claimed or embraced in the statement of the invention. Claims 11-20, directed to a method for providing analysis, present subject matter that was not originally claimed or embrace by the statement of the invention. A supplemental oath or declaration is required under 37 CFR 1.67. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 9, 10, 11, 12, 14, 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland (article, Risk assessment in construction schedules) in view of White (book, How Computers Work).

Regarding claim 1, Mulholland discloses a system for providing an analysis of use in managing risk, the system comprising: a knowledge base, for maintaining a generic risk record including a plurality of different fields at least some of which have values based on experience

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gained over time (HyperCard knowledge base in Fig.5; previous project experience in Fig.2; historical data discussed at P.11, C.1, L.5); a data store of profiles, for maintaining a profile risk record associated with a particular profile (a particular construction project type) and including the same plurality of fields as the generic risk record, the profile risk record for use in providing a risk assessment in the associated profile (conceptual project schedule in Fig.2; estimate of project duration at P.11, C.1, L.8-12); a risk processor, for updating the generic risk record based on the profile risk record in the data store of profiles (three recursive steps at P.11, C.1, L.12-17); whereby at least some of the field values of the generic record are refined over time based on values of the corresponding fields of the profile risk record (changes in elements within the knowledge base model discussed at P.12, C.2, last paragraph; transfer project experience and institutional knowledge to new projects discussed at P.14, C.2, L.10-13). The Mulholland profile record (previous project experience) is used to update the records within the knowledge base for a particular project that is being analyzed.

Mulholland does not specifically disclose the particular storage arrangement of the HyperCard regarding field values. First, if the values that are contained within the field are being claimed, the values are considered to be nonfunctional descriptive material that is of no import to the scope of the claim insofar as the claim is drawn to a system made up of elements capable of performing the recited functions, and the claimed "field value" broadly includes absence of information in a field. Second, White teaches the use of field values to comprise a stored record (P.79) and records with the same fields constitute a table. If weight is given to the system record structure in that it includes field value, then it would have been obvious to one of ordinary skill in the art to modify Mulholland to include field values corresponding to

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comparable records, such as taught by White, in order to organize information for more efficient retrieval and storage.

Regarding claim 2, the fields of Mulholland include engineering, procurement, construction, and project management. Mulholland discloses that some of the risk record fields are measuring fields input by the user, and some are calculated fields calculated by the system (the example provided at P.12, C.2, last two lines, the changes in an element [an input risk record field] will not significantly affect the project schedule [a calculated risk record field], for example), and the system allows different modes of analysis in which the fields that are the measuring fields differ (one analysis mode: reexamination of the assumptions and identification of factors driving the construction schedule, and another analysis mode: recognition of hidden assumptions are discussed P.13, C.2, L.4-9).

Regarding claim 4, the Mulholland system is used in different modes of use (three phases, including engineering design, procurement, and site construction, discussed at P.9, C.1, L.47-49), and further wherein only some fields are required to be used in the risk management analysis, the fields that are required depending on the mode of use (each phase has its own unique set of variables and is differentiated from the other phases by work content discussed at P.9, C.1, L.49-51). The Mulholland system is flexible in that the analysis can be for any combination of the modes (engineering design, procurement, and site construction).

Regarding claim 5, Mulholland discloses both a generic risk record and a profile risk record comprise: a risk component, for indicating a risk, for indicating an inherent risk rating, and also for indicating a residual risk rating (schedule risks discussed at P.11, C.1, L.14 and potential schedule risks at P.11, C.1, L.37-41); a cause component, for indicating cause of the risk (table 3 at P.11 describes some cause components for various risks); a consequence component, for indicating a particular consequence the risk and the inherent and residual of the particular consequence (effects of risks are discussed at P.11, C.1, L.14-15 and modeling of the risks and obtaining the schedule risk profile based on the risks as noted at P.11, C.1, L.16-17); and a control indicating component, for indicating a control, for whether the control is corrective or preventive, and for indicating the effectiveness of the control (the term act or action is used as a control for managing risk; for example, manager acts quickly and decisively at P.14, C.1, L.4-5 and risk management action at P.14, C.1, L.22-23).

Regarding claim 9, Mulholland further comprising a scripting facility for enabling a user to create a script directing how a risk management process be performed, the script indicating steps that can be used in performing risk analysis in any profile (computers are used for assessment of schedule risks and the navigational links within the system can be defined by the user as discussed at P.12, under the headings Application of Computers and HyperCard Information System for Risk Identification).

Regarding claim 10, Mulholland includes a risk processor that includes values used in determining risk, as depicted in Tables 4 and 5. Note Fig. 2 whereby the conceptual project risk

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values are based on values from the knowledge base. A knowledge base inherently includes values based on experience gained over time (facts, rules, heuristics, procedures) within its collection, as evidenced by the definition of knowledge base (attached). Moreover, the examiner takes Official notice that it is well known in the art of computer storage and programming to providing initial values, i.e., initialize a record, and that the initial values must be commensurate with the desired result. Therefore, the particular value that is present in the record upon initialization is a determination that is within the level of ordinary skill in the operations research art, in order to be certain that the output of the processor is relevant to the information that the user desires.

Regarding claims 11, 12, 14, 15, 19, and 20, applicant admits that the method claims correspond to the system claims and the examiner notes that the claims are directed to a method of analysis, broadly, intended "of use in managing risk." As such, Mulholland as applied above meets the method steps insofar as the method steps are capable of being performed by the above combination. The method claims do not include a step directed to risk assessment, but instead (in paragraph (b)) claim the possibility or intended use of the profile risk record that is maintained. The HyperCard of Mulholland is intended for and is capable of maintaining information. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system as noted with regard to claims 1, 2, 4, 5, 9 and 10 above, for its intended purpose by maintaining records and updating information.

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3. Claims 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland, as applied to claims 2 and 5 above, in view of a prior art admission by applicant(s).

Mulholland discloses choosing a mode of assessment as discussed with respect to claim 2 above; however, Mulholland lacks the particulars of the mode of assessment as recited in claims 3 and 6-8.

Applicant discloses as prior art the use of aggregated calculations in risk assessment (P.24, L.18-19), which are particularly recited in claims 3 and 6-8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mulholland to include aggregated calculations for risk assessment such as those that were “widely used ... and ... not unique” at the time of the invention, such as taught by the prior art admission by applicant(s), in order to compute and thus quantify the risk and the consequence associated with the risk.

Regarding claims 13, and 16-18, the claims do not further limit the method insofar as they do not positively recite any activities to be performed, e.g., features with an “-ing” suffix. Each limitation has been considered, however, applicant has not further modified the positively recited steps of maintaining and updating.

Response to Arguments

4. Applicant's arguments filed 22 August 2005 have been fully considered but they are not persuasive.

a. In response to applicant's argument that the examiner has indicated that Mulholland lacks an element, then points out reasons why the rejection is still properly grounded, the examiner points out that the elements of Mulholland meet the claim language it is merely the arrangement of the filed values that is lacking. The examiner then proceeded to point out two alternative interpretations of the claimed field values and how those values do not distinguish over Mulholland. In the first interpretation, although the particular arrangement is not disclosed in Mulholland, the Mulholland field values are capable of performing the claimed functionality of the nonfunctional descriptive material, and when the field values are absent information, then Mulholland would also meet the claim. In the second interpretation, White is combined with Mulholland the extent that it suggests to one of ordinary skill in the art at the time the invention was made to include field values (if interpreted as something other than nonfunctional descriptive material) in order to organize information for more efficient retrieval and storage.

b. In response to applicant's arguments against the Mulholland reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the present application the Mulholland reference is modified by the White reference for the second interpretation of the claim elements.

c. In response to applicant's argument regarding claim 1, that Mulholland is not used for risk assessment (p.8, last paragraph) or risk measurement (p.9, second paragraph), the examiner notes that the system claim does not include risk assessment, but rather provides an intended use of the system. The claims do not positively recite an element or means for assessing risk. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the claim fails to define over the Mulholland and White combination.

d. In response to applicant's argument that the HyperCard can hardly be an example of a knowledge base, applicant has defined the knowledge base (p.21) as a generic risk records having values related to risk inherent likelihood, inherent cost of consequence, and control effectiveness. The definition not distinguishable from a standard knowledge base, i.e., a collection of knowledge of an expert system. Thus, one of ordinary skill in the art would reasonably define a knowledge base as facts, rules, heuristics, and procedures (as defined in the Academic Press Dictionary of Science and Technology, document W cited on the 27 June 2005 form PTO-892). Therefore, the claims do not distinguish over the Mulholland and White combination.

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Conclusion

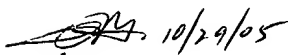
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (571) 272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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